Amendment No. 0002 to BAA 06-011
"Compact High-Power Density Waterjet"

1. The purpose of Amendment 0002 is to revise sections within the "Program Plan" outlined in this solicitation. Accordingly, in BAA 06-011, page 3, it was stated that:

- "For LCC testing the Government will also provide the inlet geometry within 60 days after the Phase I award (*in the third paragraph*),"
- "Inlet-pump interaction using a Navy specified inlet" for LCC Testing (*the first bullet under (b).*"

These two statements are revised to:

- "**For LCC testing the Government will provide the inlet geometry within 60 days after the Phase I award. However, the offerors are allowed to provide their own inlet design for LCC testing. The inlet shall be manufactured at government expense.**"
- "**Inlet-pump interactions using either a Navy specified inlet or offeror's own inlet design.**"

As a result, the Program Plan contained in page 3 of BAA 06-011 is hereby revised to read as follows:

"Program Plan:

This program consists of two phases (Phase I being Base and Phase II being Option) and is scheduled for completion by the end of FY08. A series of risk reduction demonstrations is planned, ranging from small-scale laboratory demonstrations to a large-scale at-sea demonstration of a prototype waterjet with a 7 – 8 MW power output. The technical content of each phase is described below.

Phase I – Pump Design, Model Scale Fabrication, and Large Scale Demonstration Plan:

During Phase I, the offeror shall design a waterjet pump for operation on a notional Monohull JHSS ship, and develop a detailed Phase II proposal. The estimated resistance of the notional JHSS is presented in Table 1 below. The pump will be designed to meet the performance requirements specified below. Phase I is envisioned to span approximately 7 months and may consist of multiple awards for the sign and delivery of a scaled waterjet pump model.

The model pump shall be tested by the Government in the 36-inch water tunnel and the Large Cavitation Channel (LCC) of the Naval Surface Warfare Center (NSWC), Carderock Division. The Government anticipates participation by the offeror's representatives during model testing. For both tests the Government will provided pump flange geometry within 60 days after the Phase I award. **For LCC testing the Government will provide the inlet geometry within 60 days after the Phase I award. However, the offerors are allowed to provide their own inlet design for LCC testing. The inlet shall be manufactured at government expense.** The test plan includes:

(a) Pump Loop Testing in the 36-Inch Water Tunnel:

- Pump mass flow and head rise measurements (using LDV/PIV and wall pressure taps)
- Rotor shaft thrust and torque measurements
- Cavitation testing: cavitation observations, cavitation inception, cavitation breakdown, and cavitation erosion.
- The above tests will be conducted in a uniform inflow and with an upstream wake screen simulating a notional inflow due to inlet.

(b) Large Cavitation Channel (LCC) Testing:

- **Inlet-pump interactions using either a Navy specified inlet or offeror's own inlet design.**
- Pump mass flow and head rise measurements (using LDV/PIV and wall pressure taps)
- Rotor shaft thrust and torque measurements
- Cavitation testing: cavitation observations, cavitation inception, cavitation breakdown, and cavitation erosion

It is estimated that approximately 5 (five months will be required to complete the model testing by the Government."

NOTE: The remainder of the 'Program Plan' remains unchanged as a result of Amendment 0002 to the subject Solicitation.

ALL OTHER REQUIREMENTS REMAIN UNCHANGED.